4. Enabling measures

a. National Data production and dissemination

Political justification

The existence of consolidated data on the national organic sector is a very important enabling factor for the growth of the sector because:

- It is very helpful for the development of a sound national strategy to develop the sector, to know the number and location of organic producers, the type of products produced organically, the existing marketing channels, the importance of organic imports, etc.
- Precise data on organic operators allow policy makers to better plan the type and amount of support needed, to calculate budget and expected coverage of their policy measures, etc.
- For market actors, good and reliable data about the size and development of the organic market is of utmost importance to make informed decisions, and having access to a directory of national producers and of existing organic businesses facilitates them in establishing commercial relationship (e.g. in identifying new suppliers).
- For consumers, having access to a directory of organic farmers (especially those that sell products through direct marketing) and markets can help find local organic products to buy.
- In international negotiations the importance of the domestic organic sector and market needs to be substantiated by solid data.
- It is important to guide researchers, academic institutions and other support structures in providing adequate outputs and services nationally.
- Tracking sector growth is important to demonstrate the potential of organic agriculture and to attract investors, organic input manufacturers and other supporting businesses.
- Comparative annual statistics on the organic sector also enables the assessment of the impact of national (or regional) policies (including trade agreements) on organic agriculture and the adjustment of those policies to maximize effectiveness.

Compiling national data on the organic sector is a typical public good service that will benefit multiple stakeholders, including the government itself. Unless there is a strong national organic association that can take on this task (and even so, they would typically need on-going financial support to do it), the responsibility for this falls logically on the national government. However, business data are often collected by national industry bodies (when those exist) while more detailed production data (yields) are collected by research or extension services.

<u>Suitable contexts</u>

Data collection support can be done in any culture of government intervention, and is relevant to any objective of policy support.

Data collection and dissemination is a policy measure suitable to all stages of development of the organic sector, from embryonic stages to stages of well-developed production and consumption. The intensity of the data collection (frequency and level of details) needed will vary depending on the development stage of the sector. At early stages, a punctual study to roughly locate organic producers and have an idea of their production systems and the existing market channels is enough to inform subsequent policy action. When the organic sector is well developed and organized trade is significant, then detailed production data and organic trade figures become important to monitor on a regular basis.

Data collection and dissemination can also be implemented with or without an organic regulation or an official organic guarantee system. Most of the time, when governments take on the tasks of regular data collection on the organic sector, it is when they have established an organic regulation. Indeed a regulation provides clear criteria for who may be considered organic (legal definition). It also implies a duty from the side of the government in terms of enforcement, for which the competent authority should anyways have the list of certified organic operators and access to the data of the accredited certifiers. However, in unregulated systems, the government may still conduct (or support) data collection, for example in the form of survey and studies (state of the organic sector in their country, e.g. the study financed by the South African Ministry of Trade and Industry): this should actually be a pre-requisite to the development of any organic action plan, policies and regulations.

Data collection and dissemination is a policy measure that is suitable regardless of the culture of government intervention on the organic sector, as data availability is as relevant in a free market approach as in more interventionist government cultures. Finally, data collection and dissemination is useful regardless of the objective behind the support to the organic sector (be it to improve the country's trade balance or to improve agricultural sustainability).

Possible modalities of implementation

In early stage of development, governments may conduct or finance a national survey/study on the situation of organic agriculture in the country, including an overview of organic production, active stakeholders (e.g. associations, businesses, certifiers), the standards and labels in use, and existing market channels for organic products. Such a publicly available study report supports the organic sector development and can serve as a basis for subsequent national organic action plan development.

The cornerstone of an organic data system comprises statistics on the number of organic producers, and the area certified including crop information. In regulating

countries this can be facilitated by regulations that require certification bodies to provide the data to the competent authority. Precise data on non-certified organic production are more difficult to collect and make available to the public. Nevertheless the government may approximate the number of non-certified organic producers by other means, including cooperation with the national organic association. It can also be done by including in the national agricultural census a question on whether producers considers themselves to be organic (even if not certified) – an approach that can however give reliable results only in countries where farmers are literate and where the meaning of organic is clear to farmers.

Data on the location of organic producers and their sales channels facilitate publication of a directory of organic farms, which can be used by traders, caterers, retailers and consumers to identify organic farmers in their regions. The transparent publication of all certified operators also contributes to supporting compliance, as there will be more eyes watching what happens on those organic farms.

Data may also be collected on organic processors and other organic businesses, and on points of sale. National market studies that include market figures and organic consumer behavior and trends are also very useful to the organic industry.

International trade data collection is supported by establishing specific "HS" (Harmonized Systems) codes for organic products, which are recorded in export and import transactions. Subcodes can be established for organic versions of each commodity. To date, only a few countries in the world have established such separate codes to capture organic exports and imports (namely the US, Canada and Italy). Trade data can also be compiled by other means, such as reporting by businesses, but this method will not be as reliable as using a code system.

Price and other market information on various organic commodities is also a service that is useful to organic producers for planning production, marketing and sales. Currently only a few countries have such data available. Examples are the US and some European countries (Denmark, France, Germany, Netherlands, UK), in some cases however, only for selected products.

Although the old format of newsletters and printed directories still exist and are used, digital tools are rapidly developing to disseminate data in a more efficient way. They range from searchable online databases and active maps to smartphone apps. Online tools for the collection of data are, so far, used only rarely. One example is the OTX platform that captures organic farm gate prices <u>https://trade.o-tx.com</u>.

Country examples

In the **USA** a number of private and public institutions are engaged in the regular collection of data on organic agriculture. In many ways the US is a role model for organic data collection – it has been one of the first countries to collect the data among the certifiers, and has pioneered a system for export data collection, which is fully integrated into general agriculture export statistics. It collects a wide range of farm-

level indicators and has excellent documentation and description of statistics available to the public and promoted through social media. See more information in the Best Practice Example box.

Canada also has some specific HS codes for organic imports (63 codes currently)¹²⁷, which cover a limited number of products. 13 new export codes for organic grain and commodities will be implemented in 2017: data are expected to be published by 2018. The federal government also includes two questions on organic in their Agricultural Census that takes place every five years. The province of Quebec has a mandatory organic data collection system through CARTV, their council in charge of quality schemes. It collects information on all organic operators in Quebec, including acreages and other statistics. The annual collection of organic area (including crop details) and operator data (based on information from the certifiers) as well as data on retail sales (based on data from market research companies) is collected and disseminated by the private sector, the Canada Organic Trade Association COTA.¹²⁸

The government of **Switzerland** co-funds the annual compilation of global organic statistics by FiBL. "The World of Organic Agriculture", published annually by FiBL and IFOAM-Organics International, provides a global overview of organic farming statistics including area under organic management, specific information about land use in organic systems, numbers of farms and other operator types as well as selected market data.

In the **EU** the regulation on organic farming, requires all EU member states to provide basic data on organic farming to Eurostat. With the exception of Chile, there is no other country or region in the world where data collection on organic farming is mandatory in the organic regulation. Since 2008, the obligation to provide the data is defined legally in the EU organic regulation. Eurostat, the EU's statistical office, compiles for each country the number of organic operators, the organic crop areas and production, organic livestock and livestock production. Each Member State and some other European countries are asked to provide the data on an annual basis, using a harmonized questionnaire. The data are usually based on data of the control bodies, which are then compiled by the national authorities. Eurostat publishes the data on its website, in several searchable databases in English, French and German.

Regarding organic trade, currently there are no separate codes for organic products used across all EU Member States, which means that organic international trade is difficult to quantify and there are no figures for the EU organic exports and imports. However, some countries have started to use specific codes for organic imported products, e.g. Italy. Starting in 2017 the European Commission will begin collecting data on organic imports through a compulsory electronic certification system. However, there are no plans yet to generate publicly available statistics from this system.

¹²⁷ The Certified Organic Commodity Harmonized Import Codes are available at the website of Agriculture and Agri-Food Canada at http://www.agr.gc.ca/eng/industry-markets-and-trade/statistics-and-market-information/by-product-sector/organic-products/organic-production-canadian-industry/certified-organic-commodity-harmonized-import-codes/?id=1199997881628

¹²⁸ Information from the Canada Organic Trade Organization

For exports, consolidated data including a detailed breakdown by product is reported only by Denmark. Some countries, such as Italy and Spain provide a number for the total export value with some commodity details.

Retail sales data are mostly collected by private research companies and then disseminated by the private organic sector (Belgium, Germany, The Netherlands, Sweden and United Kingdom). Only in Denmark and Sweden, is this data also collected by the national statistical offices. In Spain, an annual study on retail sales is commissioned by the Ministry of Agriculture. Retail sales data collection is particularly difficult in the newer member states. Only few of them (e.g. the Czech Republic) collect retail sales data on a regular base. Hence there is an information gap on the market in the Central Eastern European countries. Aggregated EU und European retail sales data (total retail sales, organic market share, and per capita consumption) are available from FiBL and the Agricultural Market Information Company AMI, who provide them regularly in the yearbook "The World of Organic Agriculture" and other publications.

Statistics Sweden collects data not only for areas of crops but also for yields, which gives not only valuable information to the market but also an idea of how organic yields compare to conventional. For yield comparisons the data needs to be analyzed on municipal or parish level as otherwise difference in uptake of organic in intensive and less intensive areas will influence the results.

In **Italy**, in 1999, the Ministry of Agricultural, Food and Forestry Policies established the National Information System on Organic Farming (SINAB), implemented by two national institutes (ISMEA, the Institute for Market Services on Agro-food Sector and MAIB, the Mediterranean Agronomic Institute of Bari). The SINAB contains a considerable amount of administrative information related to organic farming including operators, area, livestock and production data, and also import data based on data from the customs and import authorizations. It is the only system used by the Central Administration, regions and control bodies. The data is also used for the Eurostat data compilation.

In the framework of the Italian National Rural Development plan 2014-2020, a new project aims at additional use of the enormous amount of data available on the SINAB database. The online platform will be able to provide market information relevant to organic entrepreneurs and to facilitate the implementation of rural development and supporting organic sector policies.

Retail sales data in Italy is available from the private sector association of processors and organic traders Assobio; in addition the public market research organization ISMEA provides product-related retail sales data based on samples.

In **France**, Agence Bio, the French public agency for organic agriculture, is in charge of all data collection and dissemination on organic agriculture. It has a very comprehensive website with background information and all relevant statistics on the French organic sector (production, operators, retail sales, exports and imports, public procurement) as well as on public support available to organic. It maintains a directory of organic operators and a database of all organic events taking place in France (<u>http://www.labiodes4saisons.eu/</u>). It has also developed a smartphone App "La Bio en

Poche" which is directly connected to the directory database and allows users to immediately locate a nearby organic point of sale, a restaurant or an event.

Denmark has probably the best system for organic data collection in place for organic retail sales and international trade data. Since 2003, this data has been collected annually from companies by Statistics Denmark. For retail sales, per-product volumes and value are collected from supermarkets, which constitute approximately 90 % of all organic sales in Denmark. For imports and export, values are available by product and by country. A new feature is the data collection on catering sales data. All data are easily accessible in Danish and English via an online database at the Statistics Denmark website. Additionally, the Ministry of Environment and Food has been publishing for several years an annual digital overview (in spatial data format) of all organic fields in Denmark.

In the **Czech Republic** data on organic agriculture is supplied by the Ministry of Agriculture, which has mandated the Institute of Agricultural Economics UZEI to collect the data. Data collection includes farm-level and operator data, including on-farm consumption, and also data on retail sales and exports and imports; the latter are collected among the companies that are trading organic products. In addition, the government funds the compilation of a yearbook on organic farming in the country. The yearbook is available in Czech and in English and can be downloaded from the website of the Ministry of Agriculture.

In **Latin America** most countries have an organic regulation and hence data on area, production, and in some cases livestock, are available for several countries. There are some very good examples of collection systems for export data (Argentina, Chile, Dominican Republic, Ecuador, Peru), which by far exceed the scope and quality of export data that are available from major organic markets such as Germany, where nothing is available. The strong focus on export data reflects the importance of organic exports for Latin America.

Argentina has one of the best data collection systems in Latin America for area, livestock and export volume data, including exports by destination. Each March a comprehensive, consistently structured, detailed report is issued by SENASA, the authority in charge. The Ministry is currently financing the establishment of the Guía Orgánica (Organic Guide) interactive website in which consumers interested in organics can find organic points of sales, products, and product information.

Peru now provides detailed data on organic exports (volumes and values), which are compiled by the export promotion agency PromPeru, outstanding examples of collection of export data. Area data and producer numbers are provided by the control authority SENASA.

In **Taiwan**, the Organic Center at the I-Lan University developed the Taiwan Organic Information Portal with funding from the Council of Agriculture. It consists of three parts: the system to disseminate organic agricultural information; the system derived from the organic certification database; and the organic e-commerce system, linking producers and consumers. The portal contains tools for consumers to find organic farms in their neighborhood or to buy organic products online. Area data and producer numbers are available from the website of the Taiwan organic agriculture information Centre.

In **China**, CNCA (the National Certification and Accreditation Administration) is responsible for collecting, compiling and releasing national statistics on organic agriculture. Since 2005, collection efforts have continuously been enhanced. In 2014, a "White Book" on organic farming in China was published, giving access to the data (area, production, exports, imports, domestic market) and substantial background information. An English translation of the white book by the company "Organic and Beyond" has made the information internationally accessible. China is currently working to integrate the data for the international certifiers, thus making the picture more complete.

In **India**, APEDA, the Agricultural & Processed Food Products Export Development Authority, compiles data on exports through Tracenet, an online software for organic certification which issues the Organic Scope and Transaction Certificate. Basic data (area) and some export volume data are displayed on the APEDA website.

In **The Philippines**, the 2010 organic law mandates the BAR (Bureau of Agricultural Research) to coordinate with other agencies on data and information on organic agriculture. Since in The Philippines, the vast majority of organic producers are not third party certified, organic certifiers cannot be used as the main source of statistics. The National Organic Agriculture Program (NOAP) maintains a database and publishes yearly statistics that include third party certified, PGS-certified and non-certified organic producers. The data is obtained through agricultural technicians in the Local Government Units, who are assigned to implement the NOAP and expand the adoption of organic agriculture in their area of responsibility.

In **Tunisia** data on production area and export are collected by the Ministry of Agriculture. The data and producer lists are presented on the website of the Technical Centre of Organic Agriculture. Tunisia is the only country in Africa that has a governmental data collection system in place.

Best practice example(s)

Best Practice Example: Organic Data Collection in the USA

In the USA a number of private and public institutions are engaged in the regular collection of data on organic agriculture. A wide range of production-related data as well as international trade data is available from the United States Department of Agriculture (USDA). Retail sales data are provided by the private sector – the Organic Trade Association (OTA).

In many ways the US is a role model for organic data collection – it was one of the first countries to collect the data among certifiers, and has pioneered a system for export data collection, which is fully integrated into general agriculture export statistics. USDA's organic farm survey demonstrates how a wide range of data on organic agriculture can be compiled and

disseminated. Efforts of the USDA's Economic Research Service (USDA – ERS) date back to the 1990s. Up to 2011 data on area, livestock numbers and producers were collected among certifiers and published on the ERS website.

Now, the data collection is done by USDA's National Agricultural Statistics Service. Five comprehensive surveys on organic agriculture (2008, 2011, 2014, 2015, and 2017 in progress) have been conducted by ERS/NASS¹²⁹. The data are directly collected from the producers. These surveys asked about organic farming and ranching activities, including a wide range of indicators such as:

- Production of field crops, vegetables, fruits, tree nuts, berries, livestock and poultry;

- Production practices such as pest management, cover crops, crop rotation, rotational grazing, conservation tillage, water management and buffer zones;

- Production expenses;

- Marketing practices, including wholesale, retail and direct-to-consumer sales; and

- Value-added production and processing.

Furthermore, in the 2014 Farm Bill, EUR 3.7 million is allocated annually, mostly for data collection and analysis on organic product pricing, which supports market decisions and analysis and is otherwise beneficial, for example, for establishing mandated organic crop insurance payment levels. The USDA Agricultural Marketing Service (AMS) freely disseminates market and pricing information for approximately 250 organic products through its USDA Market News and ERS has published historical prices comparisons across commodity sectors based on AMS data¹³⁰.

For external trade data (exports and imports), the USDA introduced in 2011 selected specific HS¹³¹ tariff codes for selected fresh and processed organic agricultural products, and has been adding new codes annually¹³². This HS coding does not yet fully capture existing organic trade, but it has proven to be a useful tool to evaluate changes in trade that may result from equivalence agreements such as the EU-U.S. arrangement¹³³. The data are available in a searchable online database at the USDA Foreign Agricultural Service (FAS) website together with overall agricultural export and import data.

Retail sales data to measure the demand and size of the US market are published annually by the private sector Organic Trade Organization OTA, based on data compiled by market research institutes¹³⁴.

https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Organic_Production/

¹²⁹ Findings from all four NASS producer surveys are available at

¹³⁰ The ERS organic price tables are available at http://www.ers.usda.gov/data-products/organic-prices.aspx

¹³¹ HS = Harmonized System Codes, an international harmonized commodity description and coding system.

 $^{^{132}}$ The Organic Trade HS Codes are available at the FAS website http://www.fas.usda.gov/organic-tradehs-codes

¹³³ The export and import data is available at the website of the Foreign Agricultural Service FAS data is available here http://apps.fas.usda.gov/gats/ExpressQuery1.aspx

¹³⁴ The Organic Industry Survey of the Organic Trade Association is available at https://www.ota.com/news/press-releases/19031

<u>Pitfalls and challenges</u>

On a global level, data on organic agriculture has grown and improved considerably in the past years, particularly data on organic agricultural land. However, challenges remain, including data gaps and issues related to definition, classification, standardization, quality, and access. Therefore, increased attention to data collection on organic agriculture is warranted in order to fill data gaps, harmonize data and improve data quality.

There is still a major lack of data on organic agriculture in many countries. Even when governments have set up data collection systems for organic data, the number of indicators collected is still relatively low. Beyond area and operator data, the volumes and value of production, retail sales, and imports and exports by product or product groups would be valuable. In addition, the collection of price data should be considered. One possible approach to the challenge is expanding data collection beyond the organic authority to other bodies such as statistical offices, customs authorities and, where relevant, individual companies¹³⁵.

The collection of yield data is challenging, but provides an excellent opportunity, not only to compare organic and conventional, but even more to monitor real development in organic farming technology.

There is also a clear need to develop improved statistical processes to increase the accuracy of data about the organic market, specifically by paying more attention to coverage and adopting improved sampling procedures in the case of data that are not based on a census (in particular, retail sales). In cases where only expert estimates are available, these should be checked against other sources. It is recommended to apply the principles as laid down in the OrganicDataNetwork's (2014) OrmaCode.

Additionally, some efforts should be done to harmonize statistical processes for organic data collection at the international level, to improve comparability and coherence.

Some of the data collected (even by official sources) is sometimes not plausible. Governments that collect organic data should establish a system of routine quality checks for organic market statistical data by:

- balancing data accuracy versus timeliness in data publication and dissemination,
- applying plausibility checks, and
- comparing and crosschecking non-official statistical data from at least two independent sources to increase accuracy and consistency.

¹³⁵ Those recommendations are been made by the European OrganicDataNetwork project and elaborated in the elaborated in the OrMaCode, the ORganic market data MAnual and CODE of Practice (Zanoli et al. 2014) based on the European Statistical Code of Practice (Eurostat, 2011).

Data is most valuable when it is collected over time in a reliable, consistent, and frequent manner. Therefore governments should ensure that there is permanent funding for this activity and for maintaining long-term networks of data providers.

b. Support the institutional development of organic associations

Political justification

Organic (national) associations play a decisive role in the development of the organic sector. Historically, organic associations have initiated most elements of the organic sector, ranging from certification (with pioneers like the Soil Association in the UK and CCOF in the USA), to training and advice to farmers, organic consumer fairs, national organic logo, and consumer awareness campaigns. Organic associations, particularly if they are federated at the national level, and provided that they are strong politically and financially, can take on many of the "public interest" tasks that are necessary to build the organic sector. Hence, as civil society organizations, they can relieve the government from directly managing some of these tasks, even though they will still benefit from overall government support.

A well-federated organic sector at the national level is also key to involving the private sector in policy making, and to setting-up public-private partnerships for organic development. In terms of policy development, a national organic association can play a strong role in resolving divergences of opinion within the organic community, and forming consensus and compromises needed for advancing policies, for example the details of standards. Governments often emphasize the importance of sector constituents speaking to them "with one voice".

The risk of exclusion by the local farming community is still a factor for many farmers considering converting to organic farming. Organic farming associations play a vital role in offering a community in which organic farmers can feel a sense of belonging and interact with fellow organic farmers. Thus, government support for organic associations is connected to policy aims to convert more producers and land to organic farming. Beyond the political and social usefulness of organic farming associations, there are various examples of where a national organic association has played a decisive economic role in the development of the organic supply chain. One example is NOGAMU, the organic umbrella organization founded in Uganda in 2001. NOGAMU's work has been the principal factor in the growth and development of Uganda's organic sector. The work has included capacity building, PGS development, and consumer awareness. But also NOGAMU has assumed a very pro-active marketing role, acting as a supply chain facilitator, and creating the first specific organic market outlets and basket homedelivery scheme. Another example of a national organic association with high impact on organic development is Bio Suisse in Switzerland. They fulfill a number of functions, including standard and common logo management, public awareness raising campaigns, and market data collection.